REMARKS

The acknowledgment of Applicant's claim for foreign priority under 35 U.S.C. §119 and receipt of the certified copies of the priority documents is noted with appreciation.

Submitted herewith is a corrected declaration clearly indicating only the correct full name of the inventor as required by the Examiner.

Also submitted herewith is an Information Disclosure Statement (IDS) listing other patents and pending patent applications of the Applicant related to code conversion.

The Abstract of the Disclosure was objected to because the meaning of the phrase "which are ever decoded" is not idiomatic English. The Abstract has been amended by this amendment to substitute the phrase –were previously decoded– and, as amended, it is believed that the Abstract is no longer subject to objection. What the inventor means by the phrase "which are ever decoded" is equivalent to "calculating current data of first lienar prediction coefficients from past data of first linear prediction coefficients which are stored; calculaing durrent data of first excitation signal from past data of first excitation signal which are stored."

The phrase in question also appeared in the specification at pages 7, 8 and 11. These pages have been similarly amended. In addition, a further amendment has been made to page 15 to correct a minor typographical error.

Claims 2 to 4, 6 to 8, 10 to 12 and 14 to 16 are pending. By this amendment, claims 2, 6, 10, and 11 are amended.

The disclosed and claimed invention is directed to a method for converting code and code conversion apparatus. The application describes the general problem of code conversion on page 2 of the specification. Specifically, when considering an interconnection between a 3G mobile network and a cable packet network, for example, there is a problem in that a direct interconnection is not possible due to the difference in a standard speech coding system between the respective networks. The application goes on to describe at page 2, line 18, to page 3, line 14, with respect to

Figure 1, a conventional code conversion apparatus. The disclosed and claimed invention solves a specific problem of the prior art. Specifically, the present invention provides a method for converting code and a code conversion apparatus which, when the first codes are unavailable, can reduce the deterioration in quality of the speech signal obtained by decoding the second codes. The way this is accomplished is (1) calculating current data of first linear prediction coefficients by calculating from past data of said first linear prediction coefficients obtained in the past, if said first codes are unavailable; and (2) calculating current data of first excitation signal by calculating from past data of said first excitation signal obtained in the past, if said first codes are unavailable. Thus, even if the first codes become unavailable for a brief period of time, the second codes can still be obtained, minimizing deterioration of the quality of the speech signal obtained by decoding the second codes.

Claims 2 and 11 were objected to for certain informalities. Claim 11 has been amended ast suggested by the Examiner. Applicant thanks the Examiner for her kind suggestions for amendments to claim 2. Those suggestions have been taken into consideration in the amendment of claim 2, and similar amendments have been made to independent claims 6 and 10 as well. As amended, it is believed that the meaning of the claim limitations is clear and unambiguous.

Claims 10 to 12 and 16 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. This rejection is respectfully traversed.

The Examiner provides an analysis of the language of independent claim 10, concluding that the scope of claim 10 "includes embodiments of a computer program as a signal, and as such is nonstatutory, as an encoded signal *per se* is a form of energy and thus not a process, machine, manufacture, or composition of matter", citing MPEP §2106.IV.B. The last paragaph of the cited MPEP section is as follows:

> "If the invention as set forth in the written description is statutory, but the claims define subject matter that is not, the deficiency can be corrected by an appropriate amendment of the claims. In such a case, USPTO personnel should reject the claims drawn to nonstatutory subject matter under 35 U.S.C. 101, but identify the features of the invention that would render the claimed subject matter statutory if recited in the claim."

While the Examiner was kind enough to suggest wording for claims 2 and 11 in her objection to those claims, she has not done so in her rejection under Section 101, as clearly mandated by the cited section of the MPEP. Since there are other claims in the application not subject to this ground of rejection, it may be concluded that the Examiner recognizes that the invention as set forth in the written description is statutory, and the problem lies in the wording, or rather the Examiner's interpretation of the wording, of the claims.

Claim 10, on which claims 11, 12 and 16 depend, recites "A computer program product embodied on a computer-readable medium and comprising code that, when executed, causes a computer to perform processes . . ." MPEP 2106,01I states, in part, the following: ". . . a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035." What the Examiner has done in his analysis is to ignore the plain meaning of what is actually being claimed. Instead, he has hypothesized, based on his interpretation of the specification, that what Applicant is *really* claiming is a "signal" as "a form of energy". That, of course, is not what the claim recites. Moreover, looking to the specification at page 59, lines 20–22, it is stated that "The recording medium 6 stores a computer program to execute the following processes:" The single sentence cited by the Examiner on page 62, lines 16–20, is preceded by the following two sentences:

> "The program stored in the recording medium 6 is read out to the memory 3 through the recording medium readout device 5 and the recording medium readout device interface 4, and then is executed. The above-mentioned program may be stored in a nonvolatile memory such as a flash memory, a mask ROM and the like. The recording medium includes a nonvolatile memory, a CD-ROM, an FD, a digital versatile disk (DVD), a magnetic tape (MT), a portable HDD and so on."

The sentence which the Examiner cites merely elaborates on the preceding sentences and describes what one skilled in the computer and communication arts fully understands; that is, a computer program recorded on, for example, a hard disk of a server may be communicated to a computer via wired or wireless connection. As would be understood by one skilled in the arts, a computer program so communicated would need to be recorded in computer readable media at the computer which executes the program. Again, this media might include, for example, a local hard disk of the computer. Even if the computer program were executed by the computer directly from signals received from the server, the computer program would (1) be read from, for example, the server's hard disk and (2) at least stored in the computer's RAM, which is itself computer readable media. The Applicant is not claiming a "signal" or other "form of energy". Withdrawal of the rejection is therefore respectfully requested.

Claims 2 to 4, 6 to 8, 10 to 12, and 14 to 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,260,009 to Dejaco in view of U.S. Patent No. 5,732,389 to Kroon et al. This rejection is also respectfully traversed. The combination of Dejaco and Kroon et al. neither teaches nor suggests the claimed invention.

As clearly seen from Figure 6 in Dejaco and its explanation, a speech signal is first obtained by decoding by the speech synthesizer 606, and then the obtained speech signal is encoded by the searcher 608. A parameter obtained by the encoding by the searcher 608 is used as an output (the output corresponds to the second codes in the present invention).

Kroon et al. describe a method of decodng when a frame is erased in a decoder. Basically, a parameter of the erased frame is replaced with the parameter of a latest non-erased frame.

In contrast, one feature of the claimed invention is "calculating current data of said first linear prediction coefficients by calculating from past data of said first linear prediction coefficients obtained in the past, if said first codes are unavailable; and calculating current data of said first excitation signal by calculating from past data of

said first excitation signal obtained in the past, if said first codes are unavailable".
This feature is achieved by the "linear prediction coefficients data calculating circuit"
and the "excitation signal data calculating circuit", <u>which are not decoders</u>.
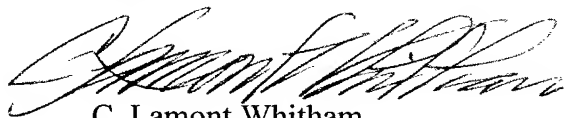
In the case of Dejaco, however, the speech synthesizer 606 is exactly a
decoder and the searcher 608 is exactly an encoder. This configuration is different
from the claimed invention. Kroon et al. also disclose a decoder. Even when the
speech synthesizer 606 (decoder) in Dejaco is replaced with the decoder of Kroon et
al., the configuration of the claimed invention cannot be obtained.

In view of the foregoing, it is respectfully requested that the application be
reconsidered, that claims 2 to 4, 6 to 8, 10 to 12 and 14 to 16 be allowed, and that the
application be passed to issue.

Should the Examiner find the application to be other than in condition for
allowance, the Examiner is requested to contact the undersigned at the local telephone
number listed below to discuss any other changes deemed necessary in a telephonic or
personal interview.

A provisional petition is hereby made for any extension of time necessary for
the continued pendency during the life of this application. Please charge any fees for
such provisional petition and any deficiencies in fees and credit any overpayment of
fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

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